WE CLAIM:

1. A method of communication in a wireless system comprising:

allocating resources of the wireless system to wireless units based on at least one target quality of service (QoS) characteristic adapted in response to a load condition.

2. The method of claim 1, further comprising:

determining a load condition of the wireless system; and

adapting a target QoS characteristic based on the determined load condition; and

allocating resources of the wireless system based on the adapted QoS characteristic.

3. The method of claim 2, wherein the adapting step adapts the target QoS characteristic in order to increase a data rate for each wireless unit as the determined load condition indicates a lower load in the wireless data system.

4. The method of claim 2, wherein the determining step determines the load condition as a function of at least one of the following parameters of the wireless data system: total forward link power used; total reverse link interference rise above thermal noise; total number of users; number of data channels used; and number of spreading codes used.

5. The method of claim 2, wherein the adapting step includes,

determining one or more parameters of a data transmission based on the adapted target QoS characteristic; and

allocating resources to the data transmission based on the determined parameters.

6. The method of claim 5, wherein

the wireless data system is a code-division multiple access (CDMA) system, and

the allocating step allocates a supplemental channel (SCH) burst transmission for the wireless unit based on the determined parameters.

7. The method of claim 6, wherein

the wireless data system is a CDMA2000 system, and

the allocating step further allocates at least one of a duration and a number of assigned spreading codes for the SCH burst transmission based on the determined parameters.

8. The method of claim 2, wherein

the wireless data system utilizes bursty data transmissions, the target QoS characteristic being a target fill efficiency, the target fill efficiency being a portion of a burst to be filled by transmitted data, and

the adapting step decreases the target fill efficiency as the determined load condition indicates a lower load in the wireless system.

9. The method of claim 8, wherein the allocating step assigns a burst transmission for transmitting buffered data, if an amount of the buffered data exceeds a data backlog threshold corresponding to the decreased target fill efficiency.

10. The method of claim 9, wherein the allocating step further assigns a duration for the burst transmission, the assigned duration allowing the burst transmission to achieve a data rate corresponding to the data backlog threshold.

11. The method of claim 10, wherein the allocating step allocates resources for transmitting the buffered data within the assigned duration, the allocated resources including at least one of: power, infrastructure hardware, and a number of spreading codes.

12. The method of claim 9, wherein adapting step adapts the target fill efficiency according to a relationship between a load (L) associated with the determined load condition and a highest determinable load (L_H) for the CDMA system.

13. The method of claim 12, wherein adapting step adapts the target fill efficiency, such that the adapted target fill efficiency (T) satisfies an equation:

$$T = \min(T_L - \frac{(T_H - T_L)(L - L_L)}{(L_H - L_L)}, T_H)$$

where

L_L is the lowest determinable load for the CDMA system,

T_L is a lowest assignable data backlog threshold, and

T_H is a highest assignable data backlog threshold.

14. The method of claim 9, wherein

the wireless system is a code-division multiple access (CDMA) system, and

the allocating step allocates a supplemental channel (SCH) burst transmission for transmitting buffered data, if an amount of the buffered data exceeds the data backlog threshold.

15. A method of communication in a wireless system comprising:

adapting at least one target quality of service (QoS) characteristic in response to a load condition.

16. The method of claim 15, further comprising:

determining a load condition of the wireless system;

adapting a target QoS characteristic based on the determined load condition; and

communicating the adapted target QoS characteristic to one or more wireless units.

17. The method of claim 16, wherein

the target QoS characteristic is a target data error rate, and

the adapting step decreases the target data error rate as the determined load condition indicates a lower load in the wireless system.

18. The method of claim 17, wherein

the wireless data system is a code-division multiple access (CDMA) system and the target QoS characteristic is a target frame error rate (FER) assigned to the wireless unit, and

the adapting step adapts the target FER based on a relationship between a load (L) associated with the determined load condition and a highest determinable load (L_H) for the CDMA system.

19. The method of claim 18, wherein the adapting step adapts the target FER (F_T), such that the adapted target FER satisfies an equation:

$$F_T = \max(F_H - \frac{(F_H - F_L)(L_H - L)}{(L_H - L_L)}, F_L)$$

where

L_L is the lowest determinable load for the CDMA system,

F_H is a highest assignable FER, and

F_L is a lowest assignable FER.

20. A method of communication in a wireless unit comprising:

allocating power to a data transmission in response to a load condition as indicated by at least one received target quality of service (QoS) characteristic.

21. The method of claim 20, further comprising:

receiving a target QoS characteristic in response to a load condition;

determining at least one data transmission parameter based on the adapted target QoS characteristic; and

allocating resources to a data transmission based on the determined at least one data transmission parameter.

22. The method of claim 21, wherein the allocating step allocates power to the data transmission based on the determined parameters.

23. The method of claim 22, wherein the allocating step increases the amount of power allocated to the data transmission when the adapting step decreases the target data error rate.

24. The method of claim 21, wherein the determining step determines an initial signal-to-noise set-point for allocating power to a data transmission.

25. The method of claim 21, wherein the determining step determines at least one parameter utilized in closed-loop power control of a wireless unit.

26. A method of communication in a wireless unit comprising:

transmitting buffered data in a burst transmission that is operable to achieve a data transmission rate, when the amount of buffered data qualifies for the data transmission rate according to at least one data transmission parameter indicative of a load condition.

27. The method of claim 26, further comprising:

receiving one or more data backlog thresholds that are indicative of a load condition;

measuring an amount of buffered data to be transmitted;

determining a highest one of the received data backlog thresholds met by the measured amount of buffered data;

transmitting the buffered data in a burst transmission operable to achieve a data transmission rate corresponding to the determined data backlog threshold.